Technical Datasheet

AH 140 / LI 130-1

Basis	**AH 140 / LI 130-1**
Resin	**AH 140**
Hardener	**LI 130-1**
Colour	yellow transparent

Applications

- Vacuuminfusion of carbon- and glass fibre parts
- Hand lay-up of carbon- and glass fibre parts

Properties

- cures tack free
- high heat resistance
- long processing time

Processing data

Product		**Mixture AH 140 / LI 130-1**	**Resin AH 140**	**Hardener LI 130-1**
Colour		yellow transparent	transparent	yellow transparent
Mixing ratio	**p. b. w.**		**100**	**35**
Viscosity at 25°C	mPas	550 ± 75	1000 ± 200	65 ± 10
Density at 20°C	g / cm^3	1,12 ± 0,02	1,17 ± 0,02	0,97 ± 0,03
Pot life 200 g / 20°C	min.	120 - 140	-	-
Curing time at RT	hrs.	40 - 48	-	-
Post curing	Time in h/ Temperature in °C	4 h 60°C + 6 h 80°C + 4 h 120°C	-	-

Physical data

Properties	**Inspect. requirem.**	**Unit**	**Value**
Flexural strength	EN ISO 178	MPa	117 ± 10
Flexural strength at breakage	EN ISO 178	%	7,5 ± 0,3
Flexural modulus	EN ISO 178	MPa	2860 ± 250
Impact resistance (Charpy)	EN ISO 179	kJ/m^2	30 ± 5
Compressive strength	EN ISO 604	MPa	95 ± 5
Heat resistance (HDT)	DIN EN ISO 75 B	°C	111 ± 3
Glass transition temperature TG	methode DSC	°C	ca. 103
Shore hardness	DIN 53505	Shore D	85 ± 2

Sales units (packages)

Units	Resin	AH 140	5,000 kg / 10,000 kg / 25,000 kg / 50,000 kg / 220,000 kg
		LI 130-1	1,750 kg / 3,500 kg / 25,000 kg / 50,000 kg

Processing instructions

The temperature of the material during the handling should be between 18 and 25°C. Resin and hardener should be mixed intensively at room temperature, avoiding the formation of air bubbles.

The ideal post-curing heating rate is of about 10°C/hour. We recommend the use of fixtures for complex geometries. The ideal cooling rate should be of 20°C/hour.

With a post-curing of 4 h at 60°C + 6 h at 80°C you reach a heat resistance HDT after DIN EN ISO 75 B of 95°C.

At room temperature (20°C), laminates can be demoulded and cut after about 2 days; by post-curing at 40-50°C after about 8 hours.

In General

Opened containers should be rapidely consumed, the hardener LI 130-1 tends to change in colour becoming brownish.

Storing

At appropriate storage 18-25°C.

Occuring crystallization due to disadvantageous storage conditions can be made return by warming up the material at approx. 60° C.
Opened containers should be closed immediately after use and be protected against moisture. This material should be used up as soon as possible.

Shelf life is indicated on the labels

Safety measure

Please follow the precaution instructions of the Government Safety Organisation of the chemical industry when working with this material. Please follow safety advices !

Waste Disposal

According to arrangement with local authorities cured material can be disposed as domestic or commercial waste.
Non-cured products are waste which is subject to inspection and has to be disposed accordingly.
In case of further questions please do not hesitate to contact our Department for Product Safety.

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